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Colin B. Burke

The Expansion of American Higher Education

On the eve of the Great Depression American higher education was a tenuous part of the country's somewhat arbitrarily defined and bewildering system of supposedly egalitarian mass-education. This structure had evolved without true central direction or planning largely in response to the formalization of the country's social and economic life. The colleges and other higher schools were becoming integrated into the age based hierarchy of education that reformers had built over the previous 80 years, but higher education was not settled into a pattern of realistic commitment to universal and equal education and had only a facade of hierarchical integration. To contemporaries, however, the previous decades of reform appeared to have achieved most of their goals, a perception which was reinforced by the record of higher education's expansion in the 1920s. That decade's experience made it relatively easy to mistake growth for democratization and to attribute its causes to the now-famous reforms in the universities, the rise of technical schools and the apparent decline of the old ante-bellum laissez-faire approach to college founding.

Expansion and Equality:

By the most conservative estimates, the absolute number of students in the country's higher schools had doubled in less than ten years after World War I, and the share of the age group enrolled had increased by over one-half to one in eight young adults. If the enrollment increases had not been stopped by the Depression, America's colleges would have served almost the same percentage of the population in 1940 as they did in 1950. Less restricted definitions of college-level education in the late 19th and early 20th centuries not only placed at least one of every five young adults in "college" by 1929 but also highlighted the evolutionary nature of the expansion of post-secondary education. They indicate that the apparently unprecedented growth of enrollments in the 1920s was due to more than the abundance of the new age of industry and the spread of universal primary and secondary education.[1]

1. The themes underlying the historial interpretation of American higher education in the late 19th and early 20th centuries are surveyed in Colin B. Burke, *American Collegiate Populations* (New York, 1982).

Attendance had been expanding at appreciable rates for over 100 years. Although the increases in the standard of living in the 20th century and changes within colleges speeded the arrival of the burdens and rewards of higher education for a large segment of the population, the expansion and "democratization" of American higher education cannot be simplistically described or explained through deterministic or intentional arguments. Neither emphasis on the fulfillment of the immediate needs of industry and agriculture nor salutes to the triumph of functionalist thinking among educators are adequate.[2]

Changes within the educational system did aid enrollment growth. The cumulative effect of years of protest by educators and economic and social interest groups led to a wide set of curricular offerings from which students could choose in the 1920s. Training for the technical trades and other professions was available throughout the country in a variety of colleges and schools and even the curriculum for females had been altered to conform to modern rhetoric through the device of the ubiquitous but nebulous "home economics." The prestigious university, devoted to research and direct service to industry, was both a reality and an ideal which was being imitated by schools and colleges intended to be specialized but equal alternatives to traditional higher education. Most states supported highly publicized technical schools, but without much contemporary or historical notice the more numerically significant "streetcar" college, processing thousands of non-resident students, had developed in many cities, and the old normal schools were turning into the ill-defined "teacher's college." Many faculties were teaching any subject a handful of students might be willing to purchase through extension and correspondence divisions. To reduce all types of educational costs and to ease pressures on research institutions, many communities had returned to a new version of ante-bellum higher education, the local junior college and its circumscribed liberal arts course.

Moreover, the public sector had finally become numerically dominant. With subsidies from local, state, and national sources, public institutions offered what many considered an education equal to that of the finest private college or university at a much reduced cost to students. But the private colleges and universities remained important. Despite the need to maintain relatively high tuitions because of growing financial pressures, and while, in most instances, having fewer facilities than the state institutions, private universities and colleges continued to attract students. For reasons difficult to reconcile with theories of the economics of education or modernization, many parents and students chose the small four-year liberal arts college (so hated by educational reformers of the time) even though those schools could hardly afford the items supposedly necessary for modern education.

But the rise of public education did not mean that equality had been achieved. The responsiveness of the reformist educators, who shaped higher education after the Civil War to the wishes and, at times, demands of the new types of private and gov-

2. The "professionalism" and "industrialization" theses on the expansion of higher education were elaborated in Earle D. Ross, *Democracy's College: The Land Grant Movement in the Formative Stage* (Ames, Iowa, 1942); R. Freeman Butts and Lawrence A. Cremin, *A History of Education in American Culture* (New York, 1962); a useful review article which cites much of the newer work is James McLachlan's, "The American Colleges in the Nineteenth Century: Towards a Reappraisal," *Teacher's College Record,* 86 (1978), 287–306.

ernmental sponsors, did not create equal access to equal facilities either across the nation or within the states. The decades of rationalization and increased millions allotted to higher education led to a new type of educational politics. A struggle within public higher education displaced the old public-versus-private battle and generated conflict within a chaotic and perhaps hidden hierarchy of public higher education. Even as late as the 1920s, the result was inequality among curricula, types of institutions, and the states. The inequalities were caused by much more than remaining sexism or racism or the laissez-faire development of the higher schools. They were the outcome of the imbalanced power of interest groups, academic values and bargaining, and the complex histories of state educational systems.

Dynamics of Growth:

Unfortunately, the agency responsible for collecting and reporting statistical information on America's schools, the Office of the United States Commissioner of Education, used varying definitions of higher education, and its figures do contain ambiguities and typological errors. But its reports remain as the only viable source of information on higher education in the period after the Civil War. Prudent and careful use of the statistical information in the many volumes and their numerous tables makes it possible to trace the expansion of American higher education from the 1870s to the decade when America had unquestionably entered both the age of industry and mass consumption. Furthermore, a separate statistical series, compiled independently of the census and other government reports, allows the statistical estimates to be traced back to a period before the age of the machine and the rise of large-scale business or bureaucracy, the 1850s, and earlier, to the 1800s.[3]

As Table 1 illustrates, higher education began expanding before the transportation revolution, before industrialization, before full marketization and before the rush of professional regulation. It grew even before such inducements forged a mandatory link between formal education and careers and helped change higher education from a system of parallel institutions to a relatively covert hierarchy on top of the tiers of primary and secondary education.

Enrollments at colleges and professional schools increased twentysix-fold between 1800 and 1860 and attendance at the recognized male and coeducational colleges rose from approximately one to three percent of the white males age 18–21. Even the Civil War's social and economic impact did not halt the growth of the post-second-

3. This article emphasizes the standard interpretations as to be tested rather than as direct guides to conclusions. It is primarily based upon the *Reports of the United States Commissioner of Education* (for the period 1870–1930) and Colin B. Burke, *American Collegiate Populations* (for the 1800–1860 period). Both of these sources make it impossible to conform to traditional standards for citations and footnotes, since this would entail a series of notes which would take many more pages than the article itself. In the case of the 1870–1930 series, the tables in this article are the product of many tables for each decade, usually with different titles and formats each year, and many special reports found in the Commissioner's Reports and related series. In the case of the ante-bellum estimates, the thousands of sources used comprise many volumes of notes. Scholars with a need for further information may contact the author for detailed citations.

Table 1: College, University, Professional, Normal and Teacher College Enrollment: 1800–1930

Year	Number	% of White Males Age 18–21
1800	1,237	1.00
1810	2,562	1.50
1820	3,872	1.50
1830	7,822	2.40
1840	12,964	2.80
1850	17,556	2.30
1860	32,364	3.10
		% of White Males and Females Age 18–21
1870	62,000	2.30
1880	118,000	3.40
1890	157,000	3.50
1900	256,000	5.00
1910	355,000	5.60
1920	598,000	9.00
1928	1,174,400	15.00

ary schooling. Male enrollments, alone, grew by 40% and at least maintained the 1860 enrollment share (see Table 2). Against the force of the economic and social turmoil of the 1870s, the proportion of males in formal programs increased to one in 23 by 1880. The most startling increase came in the 1890s when there was a near doubling of the number of male students. By 1900, almost seven percent of the young men were in the higher schools. Growth continued during the next 20 years, but the 1890s increases were not matched for three decades. During the 1920s, the male enrollments once again increased by almost 100%, and the attendance in 1930 meant that approximately one of every seven young men in the United States was in a regular program in the country's universities, colleges, teacher training institutions or professional schools. The addition of females to both the college enrollments and the base population after 1860 (see Table 1) does alter absolute numbers but not the general trends.

For the most part, enrollment expansion managed to survive decades of recession and depression, but it usually flourished during prosperity. It appears, however, that economic swings had an impact on life plans and resources affecting enrollments in later years. Enrollments did tend to parallel the growth of the percentage of the population finishing high school. But the record of different curricula must be examined to understand the causes and meaning of the growth of the post-secondary sector. Hence the series presented in Tables 1 and 2 need to be revised in order to grasp the extent to which higher education had become a part of the life course of America's youth.

Technical and agricultural education were not significant causes of the expansion of enrollments in any period. The rise of technical schools and the spread of engi-

Table 2: Various Male Enrollments by Type of Institution: 1800–1930
(Absolute Numbers and as Percent of Total Male Enrollment)

Year		Colleges/ Universities	Professional** Schools/Departments	Normal/ Teacher Colleges
1800	N	1,156	81	--
	%	93	7	
1810	N	1,939	623	--
	%	76	24	--
1820	N	2,566	1,306	--
	%	66	34	--
1830	N	4,647	3,175	--
	%	59	41	
1840	N	8,328	4,636	--
	%	64	36	
1850	N	9,931	7,625	--
	%	57	43	
1860	N	16,600	14,164	2,000*
	%	51	44	6
1870	N	23,000	12,000	5,000*
	%	58	30	12
1880	N	34,600	22,382	20,000*
	%	48	30	23
1890	N	46,220	32,000	18,000*
	%	48	33	19
1900	N	72,159	58,000	48,000*
	%	41	33	27
1910	N	119,578	66,000	38,000
	%	54	30	17
1920	N	208,686	67,000	29,000
	%	68	22	10
1928	N	427,762	93,639	61,573
	%	73	16	11

*Indicates Estimate
**("All Professional" includes all medical, theological and law students)

neering courses after the Civil War cannot account for the increased attendance. As late as 1927/28, less than seven percent of the students in the recognized colleges and schools were enrolled in any type of engineering program. The much publicized and

highly subsidized agricultural schools suffered from even more neglect. Few young men or women chose to pursue their careers through formal training in agriculture. Just before the Great Depression approximately one percent of the students in the recognized institutions were enrolled in those programs. The "technical" schools, which were established after the Civil War and which had many students who did not take either practical or scientific courses, also had a relatively poor record. They never accounted for more than six percent of total attendance down to their disappearance as a separate statistical category in the Commissioner's Reports.

The record of expansion in various curricula and types of schools requires an explanation more complex than "industrialization." Male attendance trends suggest that growth was due to more general social and economic changes. Also, the belief that professionalization, at least within the traditional occupations of law, medicine and theology, caused expansion is only partially correct. Enrollments in professional schools actually declined as a percentage of enrollments in the colleges and universities. The estimates in Table 2 are, in fact, an overstatement of the numbers of men in the professional schools in the 20th century because of the increased number of years required for certification in law and medicine. Due to the escalation of professional-school training time, a comparison of 1860, and perhaps 1880, with later decades should be based upon a reduction of the numbers and percentages in professional schools. Because necessary years of medical training had changed from one in 1860 to four in 1930 while law went from one or two to at least three, the numbers of different students contacted by the schools and the percentage of total male enrollments should be reduced. Using a divisor of three, the estimates for 1927/28 deflate to the absolute levels of the 1880s and the share of the relevant population is reduced to that of the 1870s. Furthermore, attendance at the professional schools became a smaller and smaller proportion of total male attendance. If formal training for the law had not increased from some 13,000 in 1890 to approximately 50,000 in 1930, professional training would have become a numerically insignificant part of the higher educational system.

The growth of male enrollments in undergraduate programs in the regular colleges and universities was significant, but not as easily explained as the trends in the traditional professions. Professional enrollments were conditioned by the direct and indirect costs of training and increasingly restrictive entrance policies reflecting political actions by professional groups and educators. Undergraduate attendance was stimulated by rising demands for pre-professional education and the growing number of job-related courses in the schools such as commercial and business training. But it is difficult to account for the increased enrollments, especially of young men, through a strengthened tie between the colleges and the old professions. Whatever the causes, the record of men's attendance at the regular colleges is startling and does explain why the 1920s were perceived as so revolutionary by educators.

As a percentage of white males ages 18 through 21, male undergraduate enrollments in the regular colleges and universities remained relatively stable from the Civil War to 1890, although absolute numbers more than doubled. The 1890s witnessed not only another near doubling but a 50% increase of the proportion of young men in undergraduate programs. Even more puzzling was the increase in the 1910s when the proportion grew by 65 percent. This jump was matched in the 1920s leading to the attendance of 11% of America's young men in the regular institutions, despite

the high percentage of foreign born. As with the general trends in male enrollments, the immediate reasons for the increases after 1900 are difficult to identify.

The inclusion of women in the higher educational system and the rise of formalized training for the new "profession" of teaching were the two most significant causes of this expansion. The sudden increase in total attendance in 1870 (Table 1) is somewhat of an artifact: a result of a shift in the inclusiveness of the category "higher education." From 1870 on, the Commissioner's Reports included, with ever-shifting criteria, women's colleges while more and more formerly male institutions merged with associated women's colleges and others finally opened their doors to females. Before the beginning of the 20th century approximately one-third of America's college students were female and they comprised almost one-half of all enrollments because of their domination of schools for teachers.

The other major attraction of higher education after the Civil War was teacher education. The exclusion of normal schools and teachers colleges from the Commissioner's series does not eliminate the importance of the professionalization of education to the colleges. Within the regular institutions a significant proportion of students in all postbellum decades were enrolled in both teacher training programs and teacher's courses. For the late 19th century an estimate of 30% of the students seems acceptable and in 1927/28 a minimum of 30% (perhaps as much as 40%) of the students in the regular colleges and universities were involved in teacher training.

The statistical estimates usually presented, such as those in Tables 1 through 4, understate the growing importance of institutionalized education during the 19th and 20th centuries and tend to impose the view that the recognized colleges had maximized enrollments and had led adjustments to a formalized economy and society. Not only was "higher education" more attractive, if not necessary, than such series imply, but institutions and methods outside of the regular system may well have supplied models of education for the recognized colleges and provided the most direct links between industry, business, and the common men and women of America.

The enrollment figures shown above contain at least two downward biases. Each distorts the nature and importance of "higher" education. The first is related to the development of standardized life progressions for America's youth and the accompanying emergence of the country's primary and secondary systems, but it will remain uncorrected until scholars have time to study the age distributions in American schools. During the ante-bellum period it was common for colleges to admit students whose ages ranged from 15 to 30. There was a decided trend during the era toward the modern standard of the 18- to 21-year-old span, but the age of students varied from college to college. Although a few leading schools of the postbellum period have been studied, there is not yet enough information to detail how changes in family patterns, local economies, and the crystallization of lower education affected all types of schools and the various regions. (An informed guess is that the estimated enrollment percentage for the 20th century, compared to 1850 or 1860, should be raised by at least one-fifth.)[4]

4. For an example of the studies of age distributions during ante-bellum era, see Colin B. Burke, *American Collegiate Populations,* Chp. 3. On the later period see, W. Scott Thomas, "Changes in the Age of College Graduation," *Popular Science Monthly,* 3 (1903), 159–171.

Table 3: Female Enrollments: 1870-1928
(As a Percentage of Total Enrollments)

	Colleges, Universities, Normal, Teacher and Professional Schools	Colleges, Universities, Normal and Teacher Schools only	Colleges, Universities and Professional Schools
1870	28	34	--
1880	35	43	--
1890	39	48	31
1900	31	39	35
1910	37	45	35
1920	38	44	38
1928	49	53	42

Table 4: Normal School and Teacher College Enrollment
(As a Percentage of Total Enrollment)

	In all Colleges, Universities, Teacher, Normal and Professional Schools	In all Colleges, Universities, Teacher, and Normal Schools only
1870	16	20
1880	35	43
1890	29	36
1900	30	38
1910	37	46
1920	27	31
1928	25	28

The second bias in the usual time-series was caused by the exclusion from the reports of the alternatives to the regular colleges, normal and professional schools and teachers colleges. America had a host of commercial and correspondence schools which served numbers of students equalling those in the more "respectable" institutions and unknown numbers of adults who attended business sponsored seminars and training programs. Commercial schools, teaching specific skills for lower white-collar occupations and specialized tasks such as telegraphy, had begun to appear well before 1860. Not usually included in the national statistical reports until the late 19th century, these institutions accounted for approximately one of four students in higher education in the 1870s, one of three in the 1890s and one in six in 1927/28. Although many of their students were young and many probably had not bothered or been able to structure their lives in order to progress through the measured steps of the new secondary system, these mercurial schools did provide a form of "higher" education which was attractive and accessible to a significant number of America's young. When the public and private colleges copied their methods and curricula in the 20th century, they contributed to a decline of private commercial education in the 1920s.

Table 5: Enrollments in States, 1927-8
(As Percent of the White Population Age 18-21 [W] and Total Population Age 18-21 [T])

STATE	Colleges, Universities, Professional, Normal and Teachers Colleges		Public Universities and Colleges	Private Universities and Colleges	Normal Schools and Teachers Colleges	Total Enrollment in State as Percent of U.S. Total Enrollment
	(W)	(T)	(W)	(W)	(W)	(W)
AL	13	8	4	3	6	1.5
MS	12	6	5	5	2	0.8
TN	13	12	2	6	5	2.2
KY	7	6	2	5	0	1.0
FL	7	5	5	2	0	0.5
GA	14	8	4	8	2	1.5
SC	16	8	8	6	2	1.0
NC	13	9	3	6	4	1.9
WV	11	10	4	2	5	1.1
VA	17	12	4	7	6	1.9
DC	64	44	0	64	0	1.2
MD	16	13	3	11	2	1.2
DE	5	4	5	0	0	0.1
AR	8	6	3	3	2	0.7
LA	13	8	4	6	3	1.1
OR	16	15	6	2	8	1.2
TX	15	13	4	6	5	5.0
MO	15	15	3	8	5	3.1
ND	17	17	6	1	10	0.8
SD	16	16	5	4	7	0.7
NB	20	19	8	6	6	1.6
KA	21	20	8	6	7	2.2
IA	17	17	7	7	3	2.4
IN	14	13	4	7	3	2.1
WI	15	15	5	4	6	2.5
MN	15	15	8	5	2	2.3
MI	13	12	5	3	5	3.4
OH	16	15	7	7	2	5.7
IL	17	16	4	10	3	6.9
ID	16	16	7	4	5	0.4
MT	11	11	7	1	3	0.4
WY	9	9	9	0	1	0.1
CO	21	21	7	6	8	1.3
NM	9	9	5	0	4	0.2
AZ	14	13	8	1	6	0.4
UT	17	17	11	6	0	0.2
NV	18	18	18	0	0	0.1
WA	17	17	11	2	4	1.5
OR	21	21	11	6	4	1.1
CA	19	19	8	8	3	5.6
ME	11	11	3	3	5	0.5
VT	11	11	5	5	1	0.2
RI	9	9	1	6	2	0.3
NH	19	19	6	9	4	0.4
MA	19	19	1	18	1	4.5
CT	7	7	1	6	1	0.6
NJ	5	5	2	2	1	1.2
NY	17	17	4	12	1	12.1
PA	12	12	1	9	2	6.8

Another alternative, one that seemed to be able to accomplish what many reform-minded educators in mainstream institutions could not do, was study-by-mail. Although many of the regular colleges, and even some seminaries, had engaged in correspondence instruction before the 20th century, private and semi-private companies took the lead in attracting students and developing and maintaining courses which were suited for the teaching of skills needed in business, the trades, and industry. Private firms, such as the one which became ICS, as well as those associated with colleges (the American School) shared a large-but-as-yet unknown market with the correspondence programs of the regular colleges. Very broad estimates are all that are possible, but at the beginning of the 20th century private correspondence schools enrolled, at a minimum, 100,000, and in the same period the regular colleges perhaps serviced another 50,000. By the late 1920s, the recognized institutions had some 100,000 and the major private firms probably served at least twice that number of "students-by-mail."

A third neglected part of higher education, overlooked because of its "irregularity" during a period when educators were searching for status and stability, also raises the estimates of young Americans in higher education. Both public and private colleges and universities had established extension divisions by 1900 and continued to expand these programs during the 30 years before the Crash. In 1927/28, some 220,000 people were involved in these sincere, if not well-funded, attempts to make higher education flexible, job-related and geographically and financially accessible.

These additions to enrollments in the recognized institutions and programs suggest that well over 20% of the adults of the 1920s were "attending" some form of higher education just before the Depression.

Causes of Growth:

Enrollments, however impressive, are not true indicators of the success of the colleges and universities in reaching out to the common man. Much of the expansion of attendance was due to general socio-economic change which reduced options for career pathways rather than changes internal to educational institutions. The standardization of tasks and techniques in white-collar occupations and increased certification requirements in education and other new pseudo-professions, as well as increased wealth in the country, rather than inherently attractive innovations by educators, explain much of the growth. Thus the most respected and technically advanced types of colleges and universities continued to service students from the upper and upper-middle classes during the 1920s. If the increasing levels of public subsidization were at all successful in democratizing higher education, the results are to be found in the usually underfunded normal and teacher's colleges, not in the well-supported "technical" universities. If the private colleges remained in contact with the sons and daughters of the average family, it was through the rural and old-fashioned liberal arts college and the lower-status urban college rather than the modern multiversity.[5]

5. On the question of trends in the socio-economic backgrounds of college students over the period see Colin B. Burke, *American Collegiate Populations*, Chps. 4 and 5.

The expansion of enrollments and the supposed democratization of the student population compared to the ante-bellum era are sometimes pictured as being caused by a movement towards efficiency in higher education. In particular, the eighteen-fold increase in enrollments between 1870 and 1930 has been seen as the result of the development of large multipurpose institutions and the elimination of numerous small, inflexible, and unstable "old-time" colleges. However, not only are the typical estimates of 560 colleges and professional schools in 1870 and only 1400 in 1930 deceptive, but the instability of the small colleges may well have been overstated. The large and supposedly efficient new colleges and universities were really conglomerations of previously separate schools. It is unclear whether these moves toward administrative consolidation truly brought efficiency and stability and an unfinished study of the longevity of the colleges from the Civil War to the 1930s indicates that much of the seeming turmoil of the period was the result of general social change, such as the demise of separate institutions for females, rather than of irrational decisions by educators, towns, or religious denominations. Available statistical data on medical and legal education show that the closing of medical schools (over 80 or one-half disappeared between 1900 and 1930) neither increased attendance or democratized their student populations while the increase in the number of law schools, especially night and part-time ones, was accompanied by phenomenal enrollment expansion.[6]

Results of Expansion:

The result of this enrollment growth was not equality or equity. Not only did states and regions differ in the percentage of students enrolled, but within any area students were exposed to varying levels of costs, quality, and opportunities for higher education. Deriving from more than the ratio of private to public education, the inequalities, and perhaps the expansion, were the consequence of a disorganized system which was overlaid with only an apparent rationality.

America always had state and regional differences in enrollment levels, the number and types of institutions, and the balance between public and private schools. Although reform movements had eliminated many disparities after the Civil War, the 1920s ended with important remaining differences in the distribution of education. Enrollments within the various states are an example. There were always "centers" of higher education where both within-state enrollments and in-migration led to a few areas having very impressive student-to-population balances. Massachusetts and Washington, D.C. had long histories of attracting students from across the country if not from within their borders. Other states had very low rates of college-going by their own young or out-of-state students. Such patterns continued through the Depression and the popularity of types of higher education varied from region to region and even from state to state (Table 6).

The variations in enrollments are difficult to explain through such obvious factors as the proportion of growth in secondary education, the wealth or the general econ-

6. A study currently undertaken by this author traces the longevity of all colleges and higher schools in the United States from 1800 to the 1950s and specifies what happened to those institutions in the statistical context of higher education in each school's immediate area.

Table 6: Number of Public and Private Universities, Colleges, Professional Schools, State, Normal and Teachers Colleges, 1927-1928

State	Public	Private	Normal	Teachers
AL	3	10	7	0
MS	4	14	1	2
TN	2	30	0	5
KY	2	26	1	4
FL	2	4	0	0
GA	7	26	3	3
SC	6	16	0	1
NC	4	29	3	4
WV	4	9	4	3
VA	5	27	0	6
DC	0	11	0	0
MD	1	16	4	0
DE	1	0	0	0
AR	4	13	1	1
LA	3	8	1	1
OK	9	8	0	7
TX	21	46	0	9
MO	7	45	0	7
ND	4	1	1	0
SD	3	8	0	4
NB	3	15	0	4
KA	12	23	0	3
IA	14	31	0	1
IN	2	24	0	4
WI	1	15	-	10
MN	7	22	1	5
MI	12	17	0	5
OH	6	51	0	3
ID	2	2	2	0
MT	2	2	0	2
WY	1	0	0	0
CO	5	7	0	3
NM	4	0	1	2
AZ	2	1	0	2
UT	2	5	0	0
NV	1	0	0	0
WA	4	6	3	0
OR	2	12	2	0
CA	31	37	0	7
ME	1	4	5	0
VT	1	3	1	0
RI	1	2	0	1
NH	1	2	1	1
MA	1	30	5	5
CT	1	8	4	0
NJ	2	13	4	1
NY	3	58	9	2
PA	2	69	3	11

Table 7: Students Enrolled in Recognized Colleges, Universities and Professional Schools: 1927–28
(In Percentages, by Subject)
(Upper Entry = Public, Lower Entry = Private)

State	MEDICAL	LAW	DENTAL	PHARMACY	THEOLOGICAL	COMMERCIAL	HOME ECONOMICS	ENGINEERING	TEACHERS	ART	AGRICULTURE
AL	2	2	0	0	0	9	6	20	13	45	1
	0	0	0	0	*	1	1	0	4	77	0
MS	2	2	0	1	0	6	7	17	7	49	14
	0	0	0	0	0	0	0	1	0	99	0
TN	11	13	0	3	0	10	9	13	17	35	6
	4	2	1	1	0	*	1	1	2	79	0
KY	7	4	2	0	0	6	3	13	6	46	3
	0	3	0	2	13	0	*	0	5	75	0
FL	0	8	0	2	0	10	3	9	27	35	3
	0	6	0	0	0	5	0	1	7	61	0
GA	2	3	0	*	0	11	28	24	1	29	2
	3	4	4	1	6	3	1	0	4	72	0
SC	3	1	0	1	0	6	3	12	6	52	7
	0	*	0	2	0	0	0	0	0	87	0
NC	1	3	0	1	0	16	2	15	10	40	3
	1	1	0	1	1	2	2	0	3	84	0
WV	3	4	0	1	0	2	9	10	7	55	4
	0	0	0	0	0	0	0	0	6	94	0
VA	11	5	2	2	0	8	*	26	3	44	2
	0	3	0	0	3	5	*	1	1	82	0
DC	–	–	–	–	–	–	–	–	–	–	–
	7	16	1	1	2	1	*	4	9	39	0
MD	15	11	14	13	0	0	0	9	5	21	4
	*	0	0	0	3	1	1	3	17	57	0
DE	0	0	0	0	0	0	7	19	13	52	3
	–	–	–	–	–	–	–	–	–	–	–
AR	6	1	0	0	0	2	4	16	21	45	5
	0	0	0	1	3	2	2	0	2	81	0

Table 7 (continued)

State	MEDICAL	LAW	DENTAL	PHARMACY	THEOLOGICAL	COMMERCIAL	HOME ECON	ENGINEERING	TEACHERS	ART	AGRICULTURE
LA	0	2	0	0	0	5	6	17	19	39	5
	8	5	2	2	0	0	0	10	0	55	0
OK	2	3	0	1	0	7	4	14	6	52	3
	0	3	0	0	4	0	0	0	5	46	0
TX	2	2	0	*	0	3	3	15	3	62	5
	2	1	1	*	3	3	*	3	7	79	0
MO	1	2	0	0	0	3	1	15	7	54	4
	5	4	5	2	6	5	*	3	1	53	0
ND	2	2	0	3	0	7	5	19	18	36	5
	0	0	0	0	0	0	0	0	0	81	0
SD	2	3	0	3	0	0	5	25	*	48	5
	0	0	0	0	0	0	0	0	5	82	0
NB	4	2	1	2	0	11	4	11	19	26	3
	3	4	3	3	1	8	0	0	10	61	0
KA	2	1	0	1	0	5	5	16	2	51	4
	0	2	0	0	2	0	*	0	0	82	0
IA	4	2	2	1	0	4	10	15	1	37	5
	0	1	0	*	2	3	1	1	5	76	*
IN	5	4	2	1	0	2	6	23	4	28	4
	0	2	0	2	2	7	*	7	8	71	*
WI	3	3	0	1	0	2	3	10	2	56	3
	5	3	3	0	4	9	1	7	0	51	0
MN	5	2	2	1	0	3	4	13	13	45	2
	0	6	0	0	7	2	0	0	1	82	0
MI	6	4	2	1	0	2	2	13	*	47	2
	0	13	0	0	2	11	2	9	1	50	0
OH	2	2	1	1	0	9	2	12	16	22	2
	1	4	1	2	2	2	*	4	12	52	0
ID	0	1	0	1	0	17	4	14	18	28	5
	0	0	0	0	0	0	0	0	0	100	0
MT	0	0	0	2	0	0	0	21	1	33	5
	0	0	0	0	0	0	0	0	0	100	0
WY	0	2	0	0	0	11	4	13	19	29	5
	-	-	-	-	-	-	-	-	-	-	-
CO	4	2	0	1	0	1	5	23	0	44	4
	0	6	3	1	2	25	5	5	0	55	0

Table 7 (continued)

State	MEDICAL	LAW	DENTAL	PHARMACY	THEOLOGICAL	COMMERCIAL	HOME ECONOMICS	ENGINEERING	TEACHERS	ART	AGRICULTURE
NM	0	0	0	0	0	4	4	22	0	37	3
	-	-	-	-	-	-	-	-	-	-	-
AZ	6	1	0	0	0	2	4	16	21	45	5
	0	0	0	0	0	0	0	0	0	100	0
UT	1	1	0	1	0	16	3	11	12	33	4
	0	0	0	0	0	13	2	1	23	28	2
NV	0	0	0	0	0	0	3	18	5	64	3
	-	-	-	-	-	-	-	-	-	-	-
WA	0	2	0	2	0	11	3	11	5	59	2
	0	4	0	0	0	4	1	0	0	63	0
OR	3	1	0	3	0	22	7	11	10	21	5
	0	14	11	3	10	0	0	0	0	49	0
CA	1	1	1	1	0	5	1	5	11	66	1
	3	8	2	1	2	4	0	4	1	43	0
MW	0	0	0	0	0	0	5	33	1	40	6
	0	0	0	0	2	0	0	0	0	98	0
VT	11	0	0	0	0	0	7	12	0	91	3
	0	0	0	0	0	0	0	13	0	85	0
RI	0	0	0	0	0	16	17	40	0	18	4
	0	0	0	0	0	0	0	6	0	83	0
NH	0	0	0	0	0	8	5	23	0	54	6
	2	0	0	0	*	4	0	1	0	97	0
MA	0	0	0	0	0	0	0	26	0	0	67
	3	15	1	1	2	5	0	8	6	31	0
CT	0	0	0	0	0	0	17	12	8	0	63
	3	5	0	0	7	0	0	10	0	67	0
NJ	0	0	0	8	0	0	2	11	*	36	2
	0	40	0	0	15	0	0	13	1	74	0
NY	0	0	0	0	0	12	0	1	2	52	0
	3	11	1	3	2	11	1	6	11	33	1
PA	0	0	0	0	0	10	3	33	11	17	14
	3	3	2	2	2	14	1	6	10	34	0

Table 7 (continued)

Public and Private College Share of Enrollment in the Programs - In Percent

Pub.	39	17	28	40	0	38	78	64	47	39	89
Priv.	61	83	72	60	100	62	22	36	53	61	11

Coefficient of Variance for State Distributions of Percentage of Students Enrolled in the Various Programs

	Public	Private
Medical	1.83	3.19
Law	1.17	1.79
Dental	2.46	2.44
Pharmacy	1.63	1.54
Theological	0	1.38
Commercial	0.89	1.53
Home Econ.	1.12	1.37
Engineering	0.42	1.28
Teachers	0.89	1.29
Art & Science	0.39	0.30
Agriculture	1.87	3.80

* Indicates .5%

omies of areas or even the availability of programs within the colleges. The balance between public and private institutions has unexpectedly low explanatory power as does the presence of the new multiversity. While all of these factors will contribute to a quantitative exploration, as will the regional cultures and the proportions of the foreign born and minorities, none stands out as dominant single-factor explanation. A similar interpretative problem is posed by state-level variations in the choice of curricula by students.

It is somewhat less difficult to find reasons for the inequalities among the institutions within a region or within the public or private domains. Regional wealth levels seem to have played a role and the monies available to the various denominations conditioned the resources held by their colleges. Also, governmental policies, directly influenced by interest groups such as business and agriculture, and the general values placed upon certain types of public education set the costs and quality of higher schooling.

Tables 8 and 9 present some of the variations of costs and resources among types of institutions and areas. Other evidence suggests similar inequalities among pro-

grams within colleges. (Agriculture departments, in 1927/28, listed about four students per faculty member while the liberal arts teacher carried close to 30.) By the 1920s, there was a hierarchy within higher education—increased public control did not result in equality. The new public educators allowed and perhaps encouraged an unequal distribution of costs and resources. The public "university" in most states

Table 8: Range of Average Tuition/Fees and Capital Values per Student, for Types of Public Institutions by States, 1927-28
(In Current Dollars)

State	Average Tuition/Fees per Student			Average Capital Value per Student		
	Public Universities, Colleges, Professional Schools and Technical Schools	Public Normal Schools	Public Teachers Colleges	Public Universities, Colleges, Professional Schools and Technical Schools	Public Normal Schools	Public Teachers Colleges
AL	68	12	-	116	-	25
	72	81	-	318	-	276
MS	27	37	27	144	133	166
	83	-	-	460	-	-
TN	15	-	31	42	-	54
	72	-	-	382	-	-
KY	52	4	19	250	7	60
	-	-	-	-	-	-
FL	44	-	-	227	-	-
	45	-	-	1,133	-	-
GA	0	18	3	75	105	11
	91	-	-	510	-	122
SC	0	-	16	292	-	177
	21	-	-	366	-	-
NC	44	6	12	68	34	170
	80	30	-	488	65	-
WV	2	-	19	-	-	34
	-	-	-	-	-	-
VA	60	-	23	211	-	126
	123	-	-	241	-	-
MD	193	-	-	350	48	-
	-	-	-	-	1,250	-
DE	93	-	-	921	-	-
	-	-	-	-	-	-
AR	10	34	26	21	117	43
	37	-	-	375	-	-
LA	15	3	13	81	185	43
	38	-	-	364	-	-
OK	0	-	12	58	-	42
	76	-	-	251	-	-

Table 8 (continued)

TX	29	–	18	121	–	61
	35	–	–	476	–	–
MO	71	–	28	546	–	65
	–	–	–	–	–	–
ND	–	20	31	–	133	124
	–	–	–	–	–	–
SD	49	–	29	273	–	126
	57	–	–	1,002	–	–
NB	52	–	14	294	–	109
	–	–	–	–	–	–
KA	71	–	42	141	–	85
	72	–	–	510	–	–
IA	73	–	45	620	–	75
	85	–	–	661	–	–
IN	31	–	42	285	–	74
	80	–	–	424	–	–
WI	68	–	7	473	–	165
	–	–	–	–	–	–
MN	62	13	12	360	123	60
	–	–	–	–	–	–
MI	26	–	8	409	–	74
	98	–	–	1,794	–	–
OH	28	–	20	56	–	62
	58	–	–	312	–	–
IL	62	–	21	399	–	71
	–	–	–	–	–	–
ID	16	9	–	319	100	–
	50	10	–	514	105	–
MT	37	29	–	244	49	–
	42	47	–	478	66	–
WY	35	–	–	395	–	–
	–	–	–	–	–	–
CO	92	–	26	405	–	117
	115	–	–	1,216	–	–
NM	23	10	26	578	103	74
	48	–	–	723	–	–
AZ	–	–	3	–	–	204
	–	–	–	–	–	–
UT	41	–	–	269	–	–
	–	–	–	–	–	–
NV	43	–	–	353	–	–
	–	–	–	–	–	–

Table 8 (continued)

WA	40	39	-	226	84	-
	68	51	-	302	141	-
OR	63	13	12	252	25	42
	66	16	-	409	56	-
CA	53	-	4	351	-	64
	-	-	-	-	-	-
ME	126	0	0	369	16	13
	-	-	-	-	25	-
VT	229	-	-	292	-	-
	-	-	-	-	-	-
NH	105	18	44	256	60	281
	-	-	-	-	-	-
MA	56	7	5	1,139	61	52
	-	10	-	-	105	-
CT	75	0	-	128	70	-
	138	0	-	1,325	206	-
RI	25	-	10	526	-	141
	-	-	-	-	-	-
NJ	142	0	0	610	61	64
	-	-	-	-	178	-
NY	8	0	0	29	30	58
	121	-	-	647	93	-
PA	103	12	33	84	205	144
	-	72	-	434	475	-

had a decided advantage over the public junior college, teachers college, and normal school. And in states with more than one major public institution, there were usually great differences among campuses. The federal subsidies for agricultural and engineering education had a major impact on institutional profiles, as did public educational politics within the states (including remaining racism), as indicated by the cost and equipment profiles for colleges of the same general type. Finally, the demise of cooperation between the states and private higher education, beginning with more liberal interpretations of the Constitution in the 19th century, meant that non-public education was facing increasing difficulties in financing itself. Perhaps in some areas, this lead to fewer options for American students to select the type of institution and educational community they desired.

At the beginning of the Great Depression, America had a varied set of higher schools which were only beginning to face the problems and potentials of mass higher education. This almost "non-system" was by no means equitable and the shift to public sponsorship and direction had not solved problems of democratic access to equal educational facilities. The shape of higher education was partially due to continued dependence upon state-level funding and direction and the division of control and financing into separate spheres for types of institutions. But it also mirrored the federal government's commitment during the 19th and 20th centuries to sponsor economic growth according to one particular view of its causes, technical training. Aca-

Table 9: Range of Tuition and Fees and Capital Values for Students in Private Colleges, Universities and Professional Schools, 1927-28

State	Tuition and Fees per Student	Capital Value per Student
AL	42	35
	131	195
MS	44	72
	89	193
TN	73	132
	339	260
KY	21	111
	142	269
FL	109	81
	173	132
GA	56	111
	157	235
SC	53	39
	62	57
NC	78	69
	116	70
WV	65	153
	90	-
VA	100	87
	111	246
DE	113	53
	168	149
MO	238	140
	259	483
AR	94	140
	159	163
LA	124	73
	149	391
OK	86	53
	123	70
TX	127	131
	129	174
MO	124	55
	182	212
ND	89	167
	-	-
SD	75	58
	144	83

Table 9 (continued)

State	Tuition and Fees per Student	Capital Value per Student
NB	131	194
	163	561
KA	91	71
	166	281
IA	164	103
	173	299
IN	117	65
	141	297
WI	119	211
	213	241
MN	130	220
	217	404
MI	47	190
	174	1,219
OH	64	94
	167	276
IL	122	88
	206	128
ID	67	48
	68	57
MT	98	93
	117	549
WY	-	-
CO	77	75
	131	281
NM	-	-
AZ	35	87
UT	45	145
	67	209
NV	-	-
WA	56	170
	148	275
OR	71	125
	124	274
CA	180	423
	317	792
ME	243	64
	257	931

Table 9 (continued)

State	Tuition and Fees per Student	Capital Value per Student
VT	98	280
	182	400
RI	324	-
NH	354	249
MA	71	20
	118	30
CT	209	782
	280	2,371
NJ	133	-
	199	54
NY	205	190
	294	251
PA	89	144
	153	637

demic values also played a role by allowing such disparities to arise and continue. The decision by the governments to aid "technical" education rather than students in general, and academic politics, which reinforced such policies, had a profound effect on the quality of education for those who sought training outside of subjects which seemed to have the most direct relation to economic development and the prestige of academicians. The education of teachers, for example, was perceived as needing only minimal funding per student and the struggling young man or woman in a "streetcar" college was subjected to an institution which might be able to fulfill minimal requirements for certification but which was unlikely to make an independent contribution to social mobility or to turn attendance from an exercise in educational "efficiency" to a meaningful life experience. The $27-per-student value of library and equipment at CCNY during the 1920s, compared to the some $600 value at New York's School of Forestry suggests that the promise of egalitarian, even democratic, education was difficult to realize within the context of America's economy and educational politics.

The continuation of a system with diffused power, even within subsystems such as state teachers colleges, meant that America's institutional profile remained as unique and fluid as it had been before the Civil War. Specialized institutions could quickly change into general colleges attempting to fulfill the same functions as the most highly-endowed universities; one institution within a system could manage to acquire resources far beyond those given to an "equal" institution; and faculties could subvert the original intentions of institutional founders and change their role from one of the distribution of knowledge to the widest possible audience to the creation of new knowledge with all the elitist consequences which come with research oriented insti-

tutions. But it probably was the lack of organization and uniformity in the American higher educational system which allowed it to attract as many students from different social backgrounds and with such different occupational and cultural goals as it did. Policies in the public sector, the failure of academics to control their own system, and the continued public-versus-private struggles forced and allowed the colleges to "play to their market" and led many to become competitors within a system that had supposedly been restructured to eliminate the instabilities caused by competition.